METHOD AND APPARATUS TO REDUCE IMAGE INTENSITY VARIATION DURING MR DATA ACQUISITION

Abstract

The present invention provides a system and method of reducing image intensity variations during imaging acquisitions that utilize large encoding gradient pulses that are played out immediately before a center of k-space is sampled. The present invention includes an acquisition and sampling that implements a predetermined delay in sampling prior to sampling the center of k-space. The delay in sampling the center of k-space following sampling of a peripheral region of k-space maintains the steady state of the MR signal and reduces the image intensity variation caused by eddy current and gradient hystersis. As such, the intensity variations throughout k-space may be reduced substantially and brought closer to the intrinsic noise level of the data acquisition.